UNITED STATES PATENT AND TRADEMARK OFFICE DOCUMENT CLASSIFICATION BARCODE SHEET

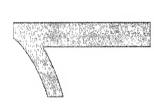
371 Application As-Filed

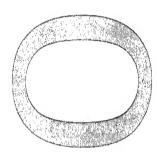
Level - 1 Version 1.1 Updated - 8/01/01 Set updated 3/01/02

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Miscelaneous





Level - 2 Version 1.1 Updated - 8/01/01

- ICE	ATTORNEY 'S DOCKET NUMBER
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ING UNDER 35 U.S.C. 371	10/088289
INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIC PCT/KR00/01028 14 September 2000 16	PRIORITY DATE CLAIMED 16 September 1999
TITLE OF INVENTION HEALTH CARE SYSTEM AND METHOD THEREOF	
TT(S) FOR DO/EO/US	
Applicant herewith submits to the United State Designated/Elected Office (DO/EO/US) the following items and other information:	the following items and other information:
1. [X] This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.	
2. This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371	inder 35 U.S.C. 371.
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (3) (6), (9) and (21) indegated below.	71(f)). The submission must include
4. X The US has been elected by the expiration of 19 months from the priority date (Article 31).	vrticle 31).
	nal Bureau).
b. 🗵 has been communicated by the International Bureau.	
	ing Office (RO/US).
n Englis	.C. 371(c)(2)).
a. K. is attached neteto. h	
ncndme	(35 U.S.C. 371(c)(3))
	ional Bureau).
b. 🔀 have been communicated by the International Bureau.	
c.	ents has NOT expired.
d. have not been made and will not be made.	
8. X An English language translation of the amendments to the claims under PCT Article 19	icle 19 (35 U.S.C. 371 (c)(3)).
9. X An oath or declaration of the inventor(s) (35 U.S.C. 371(e)(4)).	
10. X An English lanugage translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).	Examination Report under PCT
Items 11 to 20 below concern document(s) or information included:	
11. 🔀 An Information Disclosure Statement under 37 CFR 1.97 and 1.98.	
12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.	with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.	
14. A SECOND or SUBSEQUENT preliminary amendment.	
15. A substitute specification.	
16. 🔀 A change of power of attorney and/or address letter.	
17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821	e 13ter.2 and 35 U.S.C. 1.821 - 1.825.
18. A second copy of the published international application under 35 U.S.C. 154(d)(4).	d)(4).
19. \to A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).	ion under 35 U.S.C. 154(d)(4).
20. Other items or information:	

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	0000	Carolina (Total		CALCULATIONS PTO USE ONLY	PTO USE ONLY
BASIC NATIONAL BASIC INTERPRETATIONS Neither international Second International International Second International Intern	11.[X] The following tees are submitted: Season NATIONAL Exp. (1) - (5)): Neither international preliminary examination fee (37) nor international search fee (37 CFR 1.45(a)(2)) pair and International Search Report not menated.	11.LXJ Interfollowing fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)): Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO.	00 07013		
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and all claims satisf	inery examination in jed provisions of PC A APPROPRIATION	incinational preliminary examination (see 17). CLR 14-622 part to CSTTO and all claims satisfied provisions of PCT Article 33(1)-(4)	TN: \$100.00	\$1040.00	
Surcharge of \$130.00 months from the earl	of for furnishing the ciest claimed priority	Surcharge of \$130.00 for furnishing the oath or declaration later than months from the earliest claimed priority date (37 CFR 1.492(c)).	20 30	\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	17 - 20 =		× \$18.00		
Independent claims	6 - 3 =	3	- 1	25	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)	DENT CLAIM(S) (i	IM(S) (if applicable) + \$280.	+ \$280.00	3000	
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		IS	SUBTOTAL =	\$ 646.00	
Processing fee of \$1.	30.00 for furnishing jest claimed priority	Processing fee of \$130.00 for furnishing the English translation later than months from the earliest claimed priority date (37 CFR 1.492(f)).	an 20 30		
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SEND ALL CORRESPONDENCE TO:	ONDENCE TO:				
			SIGNATURE Ari M.	M. Bai	
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10/088289 TO/PCT Rec'd 14 MAR 2002

HEALTH CARE SYSTEM AND METHOD THEREOF

BACKGROUND OF THE INVENTION

(a) Field of the Invention

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Ø health management method for a user to effectively control his weight via a The present invention relates to a health management system and professional doctor's prescription.

(b) Description of the Related Art

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In response to the lifestyle changes and complications of society, various diseases of adult people have been induced and interest in health issues has increased. In particular, interest in people's weight has become connected to beauty and adult diseases, and various products have been developed to deal with this. However, most related art health management devices simply compute and inform a user of obesity, a normal weight, an encouraged caloric intake per day for an ideal body weight, or calories consumed in a day, or inform the user of a weight change determined by deducting his caloric consumption from his caloric intake.

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Therefore, the related art health management devices have problems in that it is impossible to provide information on the way to reach a desired weight, or consider a personal clinical history or dietary habits.

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encouraged caloric consumption per day with relation to an encouraged caloric disadvantage in that it is difficult to effectively control a weight since Further, the related art health management devices

intake per day is not suggested.

Furthermore, the related art healing management devices have the disadvantage in that it is impossible to receive a professional doctor's advice required for weight control as frequently as desired.

SUMMARY OF THE INVENTION

Accordingly, the present invention is directed to an apparatus and method for format converting a video that substantially obviates one or more the problems due to limitations and disadvantages of the related art.

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and caloric consumption, and body data of a user and suggests a prescription his food intake and activity contents and receive prescriptions of the doctor at in view of the prior art described above, it is an object of the present data transmission and receiving element, so that a professional doctor analyzes personal data such as personal clinic history and dietary habits, caloric intake for encouraged caloric intake and consumption per day as well as content of activity for the caloric consumption by means of the data, and the user can input invention to provide a health management device which includes

It is another object of the invention to provide a health management system and a health management method which have medical professionalism, mobility and convenience so that adult diseases due to the lack of nutrients or worse caused by inappropriate dietary habits for weight control, overeating of food and lack of exercise may be prevented and beauty may be promoted by controlling weight and managing health effectively.

management of a user according to the personal data input by the user such as In order to achieve the above objects and other advantages, a heath management system and a health management method according to the present invention may provide a professional doctor's prescription for weight body data, clinical history, dietary habits, caloric intake and activity contents

According to one aspect of the present invention, a health management device includes an input part, a control part, a memory part and an output part.

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The input part is to input basic data of a user.

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suggests a prescription of an amount of one or more food each other and time analyzing calories already taken in and consumed by a predetermined time The control part computes an ideal body weight, a body mass index and prescription by computing an encouraged caloric intake per day, distribution of a waist/hip circumference ratio on the basis of the basic data for suggesting a respective nutrients and an encouraged calorie consumption per day, of activity on the remaining intake calories and consumption point in a day when a user inputs desired food or activity content. The memory part stores the input content of the input part and stores software and data required for the processing of the control part. The output part outputs a result processed by the control part and the basic data

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part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be management device including an input part for inputting basic data, a control health another aspect of the present invention, in According to

a weight process performed by the control part, a health management method includes the steps of inputting basic data, selecting functions, computing a total caloric performed by the control part, and an output part for outputting a result of the consumption in a day, computing a total caloric intake in a day, outputting current weight status, recognizing a desired weight, and estimating after a predetermined period or a period to reach the desired weight.

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The step of inputting basic data is carried out by storing the basic data input in the input part by a user. The step of selecting functions is carried out by selecting a function to used by the user from all functions provided and performed by the health management device.

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The step of computing total caloric consumption in a day is carried out day and remaining encouraged caloric consumption on the basis of the basic by performing a function for computing total consumed calories by activity in

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The step of computing total caloric intake in a day is carried out by computing total calories taken in a day and remaining encouraged caloric intake on the basis of the basic data. The step of outputting a current weight status is carried out by outputting a current weight status on the basis of the basic data in the function selected by

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The step of recognizing a desired weight is carried out for suggesting prescription for a procedure to reach the desired weight.

step for performing estimating a weight change is a The step of

function for estimating a controllable weight from the present to a desired period or a period to reach a desired weight according to whether the user selects and inputs the desired period or the desired weight on the basis of the caloric intake per day and the caloric consumption per day from a predetermined time point in the past to the present.

device, a health management system includes a network and a database server. basic data, a control part for analyzing the basic data and assessing a desired body data on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the the control part, a data conversion device and a data transmitting and receiving In a health management device including an input part for inputting control part, an output part for outputting a result of the process performed by

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The network is to transmit data output from the health management device, and the database server is to store the data transmitted via the network for transmitting a prescription of a doctor on the basis of the transmitted data to the health management device via the network.

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Wherein, the database server has functions for analyzing the basic data, assessing a desired body data on the basis of the basic data and transmitting a prescription of a doctor to the health management device.

present invention includes the steps of connecting the database server to the health management device via a network, storing analysis data of the basic data and assessment data of the desired body data transmitted from a health management device, and transmitting prescription data of a doctor who inspects A health management method according to a first embodiment of the

the analysis of the basic data and the assessment of the desired body data of the database server by the network.

connecting the database server to the health management device via a network, user and to output a prescription of a doctor who receives the basic data and storing analysis data of the basic data and assessment data of the desired body data transmitted by the health management device in the database server, and transmitting a prescription of a doctor who inspects the analysis data of the basic data and the assessment data of the desired body data to the health According to the first embodiment of the present invention, in a health management device including an input part, a control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data and desired body data of a steps of the desired body data, a health management method includes the management device via the network.

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basic data, a control part for analyzing the basic data and assessing the desired required for the process to be performed by the control part, and an output part conversion data and a wireless transmitting and receiving device, a health present invention includes a base station, a base station control part, a network switch In a health management device including an input part for inputting body data, a memory part for storing the basic data and software and data for outputting a result of the process performed by the control part, a second embodiment of the Ø management system according to and a database server.

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The base station is wirelessly connected to the health management

device by using multi-connection communications techniques and protocol to wirelessly connect the health management device to a database server. The base station control part manages communications frequencies between the health management device and the base station for monitoring and controlling the base station.

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The database server stores information on the installation, management repair, and connection attestation in the wireless communications connection with the health management device, and transmits prescription data of a doctor to the health management device according to the basic data of a user by being connected to the health management device via the base station. part to station control base The network switch connects the database server.

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Wherein the database server may also analyze the basic data of the user and assess the desired body data on the basis of the basic data instead the health management device.

assessment of the basic data and the desired body data in a database server, second embodiment of the present invention includes the steps of wirelessly connecting a base station to the health management device by using multi-connection communications techniques and protocol, storing analysis and basic data and the desired body data, a health management method according memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data and desired body data of a user and to output a prescription of a doctor who receives the In a health management device including an input part, a control part, a

and transmitting prescription data of the database server, that is, the inspected analysis and assessment of the basic data and the desired body data, to the health management device via the database server, a network switch, a base station control part and the base station.

management device via the database server, a network switch, a base station body data in the database server, storing analysis and assessment results of the basic data and the desired body data performed by the database server in the database server, and transmitting prescription data of a doctor who inspects the analysis and assessment results stored in the database server to the health receives the basic data and the desired body data, the health management station to the health management device by using multi-connection communications techniques and protocol, storing the analysis and assessment of the basic data and the desired and desired body data of a user and to output a prescription of a doctor who method according to the second embodiment of the present invention may control part, a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to transmit basic data Wherein, in the health management device including an input part, includes the steps of wirelessly connecting a base control part and the base station.

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Both the foregoing general description and the following Detailed Description are exemplary and are intended to provide further explanation of the invention as claimed v

BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings provide a further understanding of the invention and, together with the detailed description, explain the principles of In the drawings: the invention.

- Fig. 1 is a block diagram of a health management device according to the present invention;
- a health management method 2 is a flow char: for explaining according to the present invention; Fig.
- system 3 is a flow chart for explaining a health management

according to a first embodiment of the present invention;

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- Fig. 4 is a flow chart for explaining a health management method of the health management system according to the first embodiment of the present
- system 5 is a block diagram showing a health management according to a second embodiment of the present invention; and Fig.

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health management system according to the second embodiment of the present 6 is a flow chart showing a health management method of the Fig. invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

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The present invention will be described in detail with reference to the accompanying drawings. health management device Ø a block diagram showing <u>.s</u>

according to the present invention.

Referring to Fig. 1, a health management system 100 according to the a memory part present invention includes an input part 110, a control part 120, 130 and an output part 140.

and activity degree regarded as factors for computing an encouraged caloric distinction of sex, and the body data means height, weight, waist size, hip size The input part 110 is to input personal data of a user, body data, current clinical history and habits, kind and amount of food taken by the user, and activity contents. The personal data of the user means the date of birth and the intake per day according to the routine activity of the user.

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past and present body data and a desired body data, analyzes a transition of weight, a body mass index and a waist/hip circumference ratio on the basis of The control part 120 provides a caloric intake per day, distribution of nutrients, and an encouraged caloric intake per day, computes an ideal body intake caloric body data of the user, and computes encouraged consumption per day according to the activity of the user. A prescription for the health of the user on the basis of above includes amount and kind of food, and time and content of activity for controlling excessive or insufficient calorie amounts.

part The memory part 130 stores the input content of the input part 110, and software and data required for the process to be performed by the control 120

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The output part 140 outputs contents input by the user, and a result of the process performed by the control part 120 visually and aurally. 2 is a flow chart showing a health management method according to the present invention. As shown in Fig. 2, a health management method according to the present invention includes the steps of inputting basic data \$100, selecting functions S200, computing total calories taken in a day S300, computing total current weight recognizing a desired weight S600, and simulating a future weight S700. calories consumed in a day S400, recognizing a

In step S100, a user inputs personal data such as the date of birth and the distinction of sex, kind and amount of food taken by the user, activity contents per day, body data and current clinical history, pregnancy and nursing status, and dietary habits in the input part 110 and the above data is stored in a memory part 130.

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At this time, the body data indicates past and present body data such as height, weight, waist size, hip size and activity degree together with respective data measuring dates.

taken in a day by the user. In the present invention, the activity content is An amount of activity per day means content and hours of activities organized by eating, reading newspapers, talking, driving a car, watching TV, office work and sleeping, wherein other various activities may be added.

In step S200, the user selects a function to use out of various functions provided by the health management device 100.

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the basic data input in step S100, wherein total calories and nutrients taken in a day are analyzed in step S30.5, and the total calories and nutrients taken in a In step S300, total caloric intake of the user is computed on the basis

day and a remaining encouraged caloric intake and nutrients for the day are output in step S310. If a signal for selecting a function for computing the total caloric intake per day is received by the control part 120 by the selection of the user in step S200, the control part 120 computes the total calories and nutrients taken in a day on the basis of the calories and nutrients taken for a day input in step S100.

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computed on the basis of the basic data input in step S100, wherein the total calories consumed a day are analyzed in step S405 and the total calories In step S400, total calories consumed by activities of the user in a day consumed in a day and an encouraged caloric consumption of the day, and predictive total caloric consumption in a day are output in step S410.

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in step S405, the control part 120 receives a signal selecting a function for computing total caloric consumption in a day by the selection of the user in step S200, and the control part 120 computes the total calories consumed by the user in a day on the basis of the amount of activity undertaken by the user in the day which was input in the basic data input step S100.

the control part 120 computes the caloric consumption according to each of the That is, as the user inputs time of each activity in the activity contents, activities and hours of the activities in view of the current weight by using computation formula stored in the memory part 130. In step 410, the control part 120 outputs the total caloric consumption the output part 140 and the encouraged caloric consumption of the user on the basis of the basic data input in the basic data which was input in step \$100 by and a predictive total caloric consumption in a day computed in step S405 by

the output part 140.

In step S500, a current weight status on the basis of the basic data is output, wherein the basic data is analyzed in step S505 and a prescription for the current weight is output in step S510.

with an ideal weight, for assessing how much the desired weight or the ideal either the desired weight or the desired period. The control part 120 compares and analyzes the desired weight with the current weight, or the current weight whether the user inputs the desired weight or a desired period in the selecting step. On the other hand, the basic data input in the basic data input step \$100 is analyzed with relation to the current weight when the user does not input In step S505, the basic data input in the basic data input step S100 is analyzed with relation to a desired weight or a desired period according to weight is achieved.

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and suggests a prescription per day according to the determination, wherein the achieve weight control obesity by comparing the desired weight with the current weight, or the current weight with the ideal weight, suggests the degree of the waist/hip circumference in step S510 for outputting a prescription for the current weight, the control part 120 determines a lower weight, a normal weight, an overweight and control part 120 suggests an appropriate way to according to the determination contents.

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suggesting a prescription of the weight control for the user to reach his desired body weight for a desirec period and includes the steps of setting a desired Step S600 for recognizing a desired body weight is carried out for suggesting and body weight S605, assessing desired body data S610 prescription with relation to the assessment S615.

In step S605, body data desired by the user is stored in the memory part 130 via the input part 110. In step S610, the desired body data input in step S605 is compared with current basic body data input in step S100 for assessing a current status.

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current weight, obesity, waist/hip circumference , personal clinical history, habits, as etc. and suggests the way for controlling his weight, that is, appropriate speed of the weight control, caloric intake per day, increase or decrease of calories, consumption per day, encouragement or limitation of intake food, such In step S615, the control part 120 analyzes various factors encouraged activity names, etc. by the output part 140.

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S750, performing a third simulation in step S755, and performing a fourth simulation in step S735, selecting either a desired period or a desired weight in step S740, inputting a desired period in step S745, inputting a desired weight in inputting an estimated period in step S720, inputting an estimated weight in step performing a first simulation in step S730, performing a second change from a predetermined time point in the past to the present. The future weight simulation step S700 includes the steps of selecting either designation of a desired value (a desired period or a desired weight) or not in step S710, 8715, on the basis of the caloric intake and consumption per day, or the weight controllable weight of the user after a predetermined period from the present, or a period to reach the desired body weight from the current weight is estimated In the future weight simulation step S700, a weight of the user or selecting either an estimated period or an estimated weight in step

simulation in step S760.

desired period or a desired weight) or not is carried out for determining whether the future with a desired period or weight, or dietary habits from the past to the The step S710 for selecting either designation of a desired value (a to set a basis for the estimation of the controllable weight range of the user in present The step S715 for selecting either an estimation period or an estimation weight is carried out for determining whether to set a basis for the estimation of the future body data with a period or a weight.

a period by the user in step S720, while the second simulation is performed in The first simulation is performed in step S730 in response to the input of step S735 in response to the input of a weight by the user in step S725,

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The step S740 for selecting either a desired period or a desired weight is carried out for determining whether to set a basis of estimation of future body data with a desired period or a desired weight.

of a desired period by the user in step S745, while the fourth simulation is performed in step S760 in response to the input of a desired weight by the user The third simulation is performed in step S755 in response to the input in step S750. In the first simulation step S730, the control part 120 outputs an estimated weight value on the basis of the caloric intake and consumption per day or the change of the weight from a predetermined time point in the past to the present, as the user inputs an estimated period in step S720.

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In the second simulation step S735, the control part 120 outputs an

the change of the weight from a predetermined time point in the past to the estimated period on the basis of the caloric intake and consumption per day or present, as the user inputs an estimated weight in step S725. in the third simulation step S755, the control part outputs a controllable desired weight from the present to a desired period, as the user inputs the period in step S745.

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In the fourth simulation step S760, the control part outputs a period to reach a desired weight in the present state, as the user inputs the weight in step S750 first Ø þ shows a health management system according embodiment of the present invention.

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embodiment of the present invention includes a health management device 100', As shown in Fig. 3, a health management system according to a first a database server 300 and a network 310.

The health management device 100' includes the components of the health management system 100 as shown in Fig. 1, and performs the basic function thereof. The health management device 100' may be connected to a database server 300 by a data converting device (not shown) and a transmitting and receiving device (not shown).

prescription revised by a doctor of the user, and is connected to the health management device 100' by a network 310 for transmitting the prescription which is suggested by the doctor appropriately for the characteristics of the user on the basis of the basic data of the user transmitted by the health management The database server 300 stores data required for suggesting

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device 100' to the health management device 100' by the network 310.

If any new items are generated, the database server 300 transmits the new items to the health management device 100' for the update of the memory content of the health management device 100'

The network 310 connects the health management device 100' to the database server 300 and performs arbitration of the data transmission between the health management device 100' and the database server 300. a flow chart for explaining a health management method ō according to the health management system of the first embodiment <u>s</u> present invention. 4

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nanagement system according to the first embodiment of the present invention includes the steps of connecting the network in step S805, storing data of the and transmitting a prescription of a doctor to the health management device in As shown in Fig. 4, the health management method of the step database server in health management device in the

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n the network connection step S805, the health management device 100' is connected to the database server 300 by the network 310. In the database storing step S810, the analysis data of the basic data assessment data of the desired body data of the health management device are stored not only in the memory part of the health management device 100' but also in the database server 300 for the inspection of a doctor in charge of the user.

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suggests doctor S815, the step suggestion prescription the

user's clinical history, dietary habits and degree to how much the user reaches the desired body by reviewing the analysis data of the basic data and the assessment data of the desired body data of the health management device. As the database server 300 transmits the suggested prescription of the doctor to the health management device 100' by the network 310, so that the memory prescription appropriate for the characteristics of the user after inspecting the the suggested prescription of the doctor is stored in the database server 300, content of the health management device 100' is updated.

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a basic prescription In the prescription output step S820, the health management device stored in the memory part of the health management device 100' 100' having received the doctors prescription, outputs prescription received from the doctor simultaneously.

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the health management system according to the second embodiment of the station 510, a base station control part 530, a network switch 550 and a database Fig. 5 is a block diagram showing a health management system according to a second embodiment of the present invention. As shown in Fig. present invention includes a health management device 100", a base

health management system 100 as shown in Fig. 1, and performs the basic function thereof. The health management device 100" further includes a data converting device (not shown) and a wireless data transmitting and receiving device (not shown) and may be connected to the database server by the base The health management device 100" includes the components of the station 510, the base station control part 530, and the network switch 570.

The base station 510 is wirelessly connected to the health management device 100" using multi-connection communications techniques such as CDMA and TDMA, or protocol to wirelessly connect the health management device to the database server. The base station control part 530 manages communications frequencies 510 and the base station between the health management device 100" monitoring and controlling the base station.

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management and repair, connection attestation, fee calculation and other management device 100", and transmits prescription data of a doctor to the being connected to the health management device 100" via the base station 510. Further, if any new items are generated, the database server 570 transmits the new items via the base station 510 for updating the memory content of the installation, the health nealth management device 100" on the basis of the basic data of a user by stores information on the communications connection with 570 health management device 100" server wireless database the problems in

The network switch 550 connects the base station control part 530 to the database server 570.

health management system according to the second embodiment of the present Fig. 6 is a flow chart for explaining a health management method of the invention.

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shown in Fig 6, the health management method of the health second embodiment of the present the station to base ď connecting management system according to the of steps the includes invention

management device in step S905, storing data of the health management device to the database server in step S910, suggesting a doctor's prescription in S915, and outputting prescriptions in step S920. n the connecting step S905, the health management device 100" is multi-connection communications techniques such as CDMA or TDMA and protocols. using by base station wirelessly the connected

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in the data storing step S910, the analysis and assessment of the basic data and the desired body data of the health management device 100" is stored not only in the memory part of the health management device 100" but also the database server 570 for the inspection of a doctor in charge of the user.

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suggested prescription of the doctor is stored in the database server 570, the database server 570 transmits the suggested prescription of the doctor to the health management device 100" by the network switch 550, the base station control part 530 and the base station 510, so that the memory content of the user's clinical history, dietary habits and degree to how much the user reaches assessment data of the desired body data of the database server 570. As the prescription appropriate for the characteristics of the user after inspecting the the desired body by reviewing the analysis data of the basic data S915, the doctor In the prescription suggestion step health management device 100" is updated.

in the memory part of the health management device 100" and the received In the prescriptions output step S920, the health management device 100" that received the doctor's prescription outputs a basic prescription stored prescription of the doctor simultaneously.

described hereinabove, the health management system and the health management method according to the present invention may provide a doctor's prescription according to the basic data of the user.

be protected from the overeating of salt or cholesterol related to the hardening since the caloric intake per day and an amount of exercise may be suggested brought upon them through lack of nutrients or worse due to inappropriate dietary habits by proper dietary habits and weight control provided by the health As described hereinabove, according to the health management system of the present invention, the prescription of a professional doctor is always available. Further, the health management system is convenient for weight control and health management. Therefore, not only obese people but also people with a normal weight condition may be protected from diseases of adults management system of the present invention. For example, a hypertensive may of the arteries and a diabetic may be protected from various complications, for the sake of the blood sugar level.

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It will be apparent to those skilled in the art that various modifications and variations can be made to the system and method of the present invention without departing from the spirit and scope of the invention. The present invention covers the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents

WHAT IS CLAIMED IS:

- A health management device, comprising: an input part for inputting basic data of a user;
- prescription by computing an encouraged caloric intake per day, distribution of control part for computing an ideal body weight, a body mass index and an waist/hip circumference ratio on the basis of the basic data, suggesting respective nutrients and an encouraged caloric consumption per day;

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a memory part for storing the input content of the input part, and software and data required for the processing to be performed by the control part; and

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- ð result α and data basic an output part for outputting the processing performed by the control part.
- A health management device of claim 1, wherein the basic data includes personal data including the distinction of sex and date of birth, body data, current clinical history and habits, kind and amount of food taken by the user, and content and hour of activities undertaken by the user.

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suggests a prescription of an amount of one or more food each other and time A health management device of claim 1, wherein the control part consumption calories by analyzing the calories and respective nutrients already nutrients taken in and consumed by the user by a predetermined time point in a remaining intake calories and respective when the user inputs desired food or activity contents. activity on ō

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A health management device of claim 2, wherein the body data includes past body data, current body data, desired body data, height, weight, as factors for computing waist size, hip size and a routine activity degree encouraged calories per day. 5. In a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, and an output part for a health outputting a result of the process performed by the control part, management method comprising the steps of:

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storing the basic data input in the input part by a user;

providing functions of the health management device selected by the nser;

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computing total calories taken in a day;

performing a function for computing total calories consumed by activities in a day on the basis of the basic data;

performing a function for outputting a current weight status on the basis of the basic data;

assessing how much the current weight reaches the desired weight or the ideal a desired weight or an ideal body weight respectively set by the user and performing a function for assessing a current weight level with relation to body weight;

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estimating a weight of the user after a predetermined time period on the basis of the caloric intake per day and the caloric consumption per day from predetermined time point in the past to the present; and

estimating a controllable weight from the present to a desired period or

period to reach a desired weight according to whether the user selects and inputs a desired period or a desired weight.

- 6. The health management method of claim 5, wherein the step for analyzing total calories consumed in a day comprises the sub-steps of
- outputting the computed total calories consumed in a day, remaining computing total calcries consumed in a day on the basis of input activity predictive total contents, activity hours, and the current weight by the control part; and ಥ and encouraged caloric consumption per day consumption in a day by the control part.
- 7. The health management method of claim 5, wherein the step of outputting a current weight status on the basis of the basic data comprises the sub-steps of:

computing a body mass index and a waist/hip circumference ratio of the user by analyzing the basic data for outputting whether the current weight of the user is normal or not;

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assessing a lower weight, a normal weight, an overweight and obesity waist/hip and the data, the body mass index, the current body circumference ratio; and with

suggesting a prescription.

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suggesting a prescription for the desired assessment comprises the sub-steps 8. The health management method of claim 5, wherein the step of of;

outputting a prescription for a speed of weight control, total caloric intake per day, encouragement or limitation of food intake, and encouraged activity

names via the control part;

determining whether a current status of the user is underweight, normal weight, overweight, or obesity by the control part and suggesting a way for controlling the weight according to the determination by the control part.

9. A health management method of claim 5, wherein a future weight simulation step comprises the sub-steps of:

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Ø selecting either designation of a desired value or not for estimating change of weight;

determining whether to set a basis for estimating future body data with selecting either an estimation period or an estimation weight; an estimation period or an estimation weight;

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outputting a weight estimation value after a predetermined period on the basis of either changes of caloric intake and consumption per day or a change of the weight from a predetermined time point in the past to the present if the user inputs an estimation period for performing a first simulation step;

changes of caloric intake and consumption per day or a change of the weight from a predetermined time point in the past to the present if the user inputs an outputting a period to 'each an estimation weight on the basis of either estimation weight for performing a second simulation step;

determining whether to set a basis for estimating a future body data with selecting either a desired period or a desired weight; an estimation period or an estimation weight;

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outputting a controllable weight from the present in a desired period if the user inputs a desired period for performing a third simulation; and outputting a period to reach an estimation weight in the present state, if the user inputs a desired weight for performing a fourth simulation step. 10. In a health management device including an input part for inputting basic data, a control part for suggesting a prescription on the basis of the basic data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, a data conversion device a data transmitting and receiving device using at least wire cable, a health management system comprising:

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a network for transmitting data output from the health management device; and

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a database server for storing the data transmitted via the network and transmitting a prescription of a doctor suggested on the basis of the stored data to the health management device via the network. 11. A health management system of claim 10, wherein the database on the basis of the basic data, and storing the result of the analysis and the assessment to transfer a prescription of a doctor to the health management server has functions for analyzing the basic data, assessing desired body

12. In a health management device including an input part, a control part, a memory part, an output part a data conversion device and a data transmitting and receiving device, and having functions to analyze basic data and assess prescription, to update the memory content desired body data on the basis of the basic data and desired body data of suggesting a user for directly

user, and to output a prescription of a doctor transmitted via the database according to the content of transmission of a database server, to transmit the analysis data, assessment data and the prescription performed by the health management device to the database server according to the requirement of the server, a health management method comprising the steps of:

Ø connecting the database server to the health management device via

storing the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management device transmitted from the health management device; and

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the health management device, when suggesting the prescription or updating transmitting a prescription of a doctor who inspects the analysis data of and the prescription data of the health management device by the database server to the basic data, the assessment data of the desired body data, memory content of the health management device. 13. In the health management device including an input part, a control transmitting and receiving device for transmitting basic data and desired body data of a user and outputting a prescription of a doctor who reviews the data, part, a memory part, an output part, a data conversion device and a health management method of claim 12, comprising the steps of:

Ø connecting the database server to the health management device via network;

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storing analysis data of the basic data and the desired body data transmitted from the health management device; and storing analysis and assessment of the basic data and the desired body data in the database server for transmitting prescription data of a doctor who inspects the stored data to the health management device, when suggesting the prescription or updating the memory content of the health management device

basic data, a control part for analyzing the basic data and assessing the desired body data, a memory part for storing the basic data and software and data required for the process to be performed by the control part, an output part for outputting a result of the process performed by the control part, and a data In a health management device including an input part for inputting a health conversion device and a wireless transmitting and receiving device, management system comprising:

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a base station for connecting to the health management device by using multi-connection communications techniques and protocol to wirelessly connect the health management device to a database server; a base station control part for managing communications frequencies between the health management device and the base station for monitoring and controlling the base station;

data of a doctor according to the user's basic data to the health management management, repair, and connection attestation in the wireless communications connection with the health management device, and transmitting prescription the installation, device by being connected to the health management device via the database server for storing information on station; and

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a network switch for connecting the base station control part to the

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database server.

15. A health management system of claim 14, further comprising the functions of analyzing and assessing the basic data and the desired body data on the basis of the basic data of the user and storing the result of the analysis and the assessment, wherein the prescription of a doctor is transmitted to the health management device.

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16. In a health management device including an input part, a control part, memory content management device to the database server according to the requirements of the user, and to output a prescription of a doctor transmitted via the database a memory part, an output part, a data conversion device and a data transmitting and receiving device, and having functions to analyze basic data and assess according to the content of transmission of a database server, to transmit the assessment data and the prescription performed by the health desired body data on the basis of the basic data and desired body data of user for directly suggesting a prescription, to update the server, a health management method comprising the steps of: analysis data,

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connecting the database server to the health management device via

storing analysis data of the basic data, assessment data of the desired body data, and prescription data of the health management device transmitted from the health management device; and

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inspecting the analysis data of the basic data, the assessment data of the desired body data, and the prescription data of the health management a doctor or device in the database server for transmitting prescription data of health the ţ device health management the content of management device; memory

prescription data of the health management device to the health management device via the database server, a network switch, a base station control part and a base station, when suggesting the prescription or updating the memory transmitting a prescription of a doctor who inspects the analysis data of and the the basic data, the assessment data of the desired body data, content of the health management device.

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data of a user and outputting a prescription of a doctor who reviews the transmitted data, a health management method of claim 16, comprising the In the health management device including an input part, a control rransmitting and receiving device for transmitting basic data and desired body a memory part, an output part, a data conversion device and a

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wirelessly connecting the base station to the health management device by using multi-connection communications techniques and protocols;

the storing the transmitted basic data and the desired body data in database server; and

switch, the base station control part and the base station, when suggesting the desired body data by the database server, storing the analysis and assessment ð a doctor who inspects the analysis and assessment results of the database server to the health management device via the database server, the network performing analysis and assessment of the stored basic data and the results performed by the database server, and transmitting prescription data

prescription or updating the memory content of the health management device.

ABSTRACT OF THE DISCLOSURE

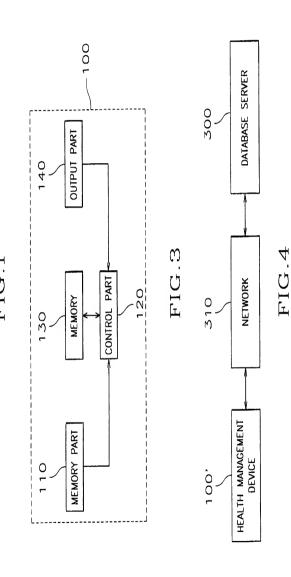
professional doctor who inspects the data analysis and assessment to the health management device via the network. If a user inputs his body data and food intake or activity contents in the health management device, the health management device analyzes and asseses the input items and provides management data directly to the user or via the database server together with the prescription of the doctor, thereby achieving effective weight control and data transmitting and receiving device, a network for transmitting data output analyzing and assessing the data transmitted via the network from the health management device. Further, the database server transmits a prescription of a A health management system includes a health management device having an input part for inputting basic data, a control part for analyzing the basic data and assessing desired body data on the basis of the basic data, a memory part for storing the basic data, and software and data required for the result of the process performed by the control part, a data conversion device, a from the health management device and a database server for storing, process to be performed by the control part, an output part for outputting prescriptions for the current body data, desired body data and health management.

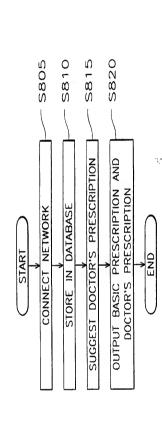
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1/4 FIG.1







3/4 FIG.5

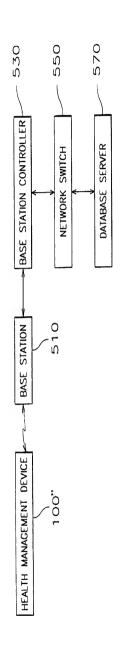
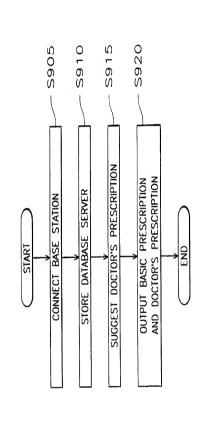
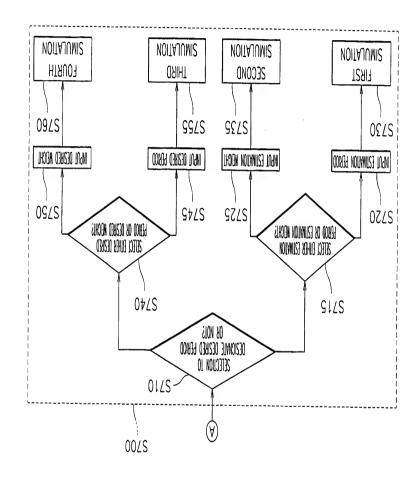


FIG.6



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나지 하인전보다 イおりな命 출원되었고 7 7 0 0 PCT H 속인전투 (하는 36) 1254

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SYSTEM AND METHOD HEALTH CARE THEREOF Ş unfess is attached hereto the specification of which following box is checked:

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as United States Application Number
International Application Number
14/09/00 and was amended on
(if applicable). I hereby state that I have reviewed and understand the contents of the above identified appecification, including the claims, as amended by any amendment referred to above.

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(Application No.) (Filing Date) (출인 번호) (출인 번호) (Filing Date) (출원임자)

(소pplication No.)

(Application No.) (Filing Date) (출연 선호) (수 연호 선호) (주민이 시호) (Filing Date) (추연 변호 전호) (주민이 기기)

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Picaty Not Claimed 16/09/1999 (DayMountVear Flash)

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(BayMonth/Year Filed) (출원일자 역/일/년)

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Direct Telephone Calls to: (name and telephone number)

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방명자의 서명	Invertor's signature (S 25/02/2002
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